CLAIMS

1. Preparation of mammalian cells possibly transfected with at least one gene coding for an active substance, to be administered systemically in a subject, characterised in that it comprises no aggregate of said cells of a size liable to induce transient or permanent malfunctions in said patient.

2. Preparation of mammalian cells according to claim 1, characterised in that it comprises no aggregates of said cells of a size greater than approximately 200 microns, preferentially greater than 50 microns and more preferentially greater than 30 microns.

3. Preparation of mammalian cells according to any of claims 1 to 2, characterised in that said cells are immortalised.

4. Preparation of mammalian cells according to any of claims 1 to 3, characterised in that the cells are non-tumorigenic.

5. Preparation of mammalian cells according to any of claims 1 to 4, characterised in that said cells are chosen in the group comprising mammalian endothelial cells and epithelial cells.

6. Preparation of mammalian cells according to any of claims 1 to 5, characterised in that said cells are chosen in the group comprising cerebral and retinal cells.

7. Preparation of mammalian cells according to any of claims 1 to 6, characterised in that said cells have undergone a biological, chemical or physical treatment preventing aggregate formation or specifically eliminating the aggregate of said cells of a size greater than approximately 200 microns, preferentially greater than 50 microns and more preferentially greater than 30 microns, and then suspended in a medium enabling their survival and not favouring their re-aggregation.

8. Preparation of mammalian cells according to claim 7, characterised in that the biological treatment consists of genetically modifying said cells with a nucleic acid sequence expressing an agent preventing aggregate formation or inhibiting the expression of an agent favouring the formation of aggregates of said cells.

9. Preparation of mammalian cells according to claim 7, characterised in that the physical treatment consists of a filtration or screening.

10. Pharmaceutical formulation to be administered systemically in a subject, characterised in that it comprises a cell preparation according to any of claims 1 to 9, combined in said formulation with a pharmaceutically acceptable vehicle enabling the survival of said cells and not favouring their re-aggregation.

11. Formulation to be administered by the intra-arterial, advantageously intra-carotid, route, in a patient, according to claim 10, characterised in that it comprises a cell preparation comprising no aggregate of said cells

greater than 50 microns in size and preferentially greater than 30 microns.

12. Formulation to be administered by the intravenous route, in a subject, according to claim 10, characterised in that it comprises a cell preparation comprising no aggregate of said cells greater than 200 microns in size and preferentially greater than 100 microns.

13. Formulation according to any of claims 10 to 12, characterised in that it comprises of the order of 1000 to 300,000 cells per microlitre of formulation.

14. Pharmaceutical formulation to be administered systemically, advantageously by the intra-arterial route, in a gene therapy method for a disease of the central nervous system in a subject, according to any of claims 10 to 13, characterised in that the cells are transfected with at least one gene coding for an active substance in the treatment or prevention of a disease of the nervous system.

15. Formulation according to claim 14, characterised in the active substance or gene in the treatment or prevention of a disease of the nervous system is chosen from the growth factors, anti-apoptotic factors, killer genes, antiproteases, immunommodulators, tumour suppressor genes, genes inhibiting the cell cycle.

16. Formulation according to any of claims 14 to 15, characterised in that it is assayed so as to enable an administration of 1 million to 200 million immortalised

mammalian cells transfected with at least one gene coding for an active substance per kilogram of weight of the subject to be treated.